



#### Alumni:

#### Greetings Agriculture Alumni & Friends!

Hope that October finds everyone in good cheer! Although the saga of the COVID-19 pandemic continues, the Department of Agriculture & Food Science is pleased to be back to a slightly modified version of normal. In spite of the challenges, it has been a productive year and we have much to be thankful. The highlight of this year is having our students back in class and getting to meet with alumni and friends in person.

We are really looking forward to seeing everyone at our upcoming homecoming event! Homecoming will be at the Ag Expo Center, Saturday October 30<sup>th</sup> (registration 9:30 am, brunch/meeting 10:00 am). We will formally recognize 2020 Awardees WKU alum Terry Shartzer, elected as Agriculture & Food Science Alumni of the Year; Bob Huttick, Agriculture & Food Science Friend of the Year; and WKU alum Fran McCall, Agriculture & Food Science Spirit of the Year. We will also announce the new Awardees for 2021. As an additional bonus, you will have opportunity to meet our new Dean, Dr. David Brown!

# 021 Newsletter

We are pleased to announce that the matching funds endowment challenge generously offered by Dr. Bob and Virginia Schneider was a complete success! This endowment directly supports the experiential learning opportunities for our Agriculture & Food Science students. Many thanks to Bob & Virginia and all that stepped up to provide this wonderful opportunity for our students! Remarkable!

In other news, a programmatic change in our curriculum received final approval this year. The Department now offers a Floristry Certificate Program. This program provides an opportunity to develop knowledge and skills for success in the retail floral business. Contact Roger Dennis for additional details.

The Department of Agriculture and Food Science has had a busy and productive year as highlighted later in this newsletter. We hope that you enjoy this year's edition! The Department wishes all of our alumni, friends, and families good health and success! We are proud to have you as part of the WKU Agriculture & Food Science family!

Best wishes,

Fred DeGraves Chair, Agriculture & Food Science

# 2020-2021 Outstanding Students

Elmer Gray Outstanding Graduate Award



Ben Duncan

Outstanding Agronomy-Plant Science Student



**Shelby Winchell** 

Outstanding Floriculture
Student



Hannah Price

Outstanding Agribusiness
Student

Outstanding Agronomy-Soil Science Student



Malachi B. Huffaker

Justin Holbrook

Outstanding Horticulture Student



Madelyne Taylor

Outstanding Agricultural Education Student



**Mattie Mink** 

Outstanding Animal Science Student



Kadie Woods

Outstanding Turfgrass Management Student

**Andrew Wells** 

# New Faculty | Staff



We are excited to welcome Dr. Luiz Silva to the department! Luiz is originally from Brazil, and he earned his B.S. in Animal Science from the Federal University of Viçosa (UFV), a traditional agriculture university in his home country. Luiz obtained his M.S. in 2014 from the UFV, and his thesis focused on the effect of growth path on carcass and meat quality in beef cattle. He also holds a Ph.D. in Animal Science from the UFV with his research developed on the use of muscle proteome analysis to investigate the biological pathways linked to meat quality differences between bulls and steers. During his Ph.D.,

Luiz was a visiting researcher at the University of New Hampshire (UNH). After his Ph.D., he worked for two years as a Postdoc at the UNH, where he conducted studies on methane emission and nitrogen use efficiency in dairy cows managed under organic and conventional production systems. Luiz began working at WKU in spring 2021, and he oversees the Meat Lab.

Luiz has research interest in the effects of cow nutrition on calf performance, carcass traits, and meat quality; improving carcass and meat quality trait in dairy beef crosses; and optimizing formulation of processed meat products. Luiz teaches the following courses:

- ANSC 140/141 Introduction to Animal Science/Lab
- ANSC 475 Animal Growth and Meat Quality
- ANSC 340 Meat and Meat Products
- ANSC 338 Introductory Livestock Evaluation and Selection

We also want to give a warm welcome to our newest faculty member, Paige Smith!

My name is Paige Smith. I grew up in middle Tennessee and was blessed to start riding and showing on a national level at 7 years old. I have competed in several different disciplines with several different breeds of horses throughout my life. I attended WKU for both my undergraduate and graduate school, in Agriculture. While there, I competed on the Western IHSA



team, making it to Nationals several times. After grad school, I began working at MTSU's Miller Coliseum managing horse shows. The past 4 years, I have been teaching agriculture at a community college in middle TN. My family and I recently moved back to Bowling Green and are excited to be back on the Hill and teaching Equine Science. WKU gives me the opportunity to combine my love for teaching and horses. I look forward to meeting all of you!



Last but not least, we'd like to introduce our new crops technician, Marie England!

Hello, I am Marie England, the new crop technician at WKU AREC. I am a Certified Crop Advisor and began in March soon before planting began. I graduated from WKU in December 2011 with my B.S. in Agriculture with an emphasis in Agronomy. I am so happy to be back at WKU! I am from Logan County, KY and was raised on a tobacco farm. I was in Agronomy retail for 8 years. I have been married for 9 years and have 2 daughters, ages 1 and 4.

# Agricultural Education News



The Agricultural Education program continues to move forward amid the new learning environments that students have been asked to participate. It has been a challenging year in and out of the classroom. Student participation in traditional activities and events were very limited, but we participated in what we could when we had the opportunity.



One of the weekly opportunities for students was to participate in the evening learning labs in EST. Students could collect observation hours by working through laboratory lessons in agricultural aviation, meat science evaluation, construction, electricity, and many more. Each activity was used to build teaching ability and knowledge in the many areas of agricultural education. Students participated in the National TEACH AG

day by participating in activities on campus. Students viewed the Teach Ag videos on the NAAE website. Members also participated in the AES Halloween meeting with many members in costume. Members also cut out tarps to be made into tents that were donated to community sites and were subsequently handed out as shelters for the homeless. AES members also participated as judges in the Barren River Spring Leadership contests. Students helped assess FFA members in public speaking and team contest events. The final event for the school year was the AES banquet that was held in April at the Faculty House. Top individuals were rewarded for their academic and their AES efforts. Leadership awards were presented to freshmen, sophomores, juniors, and seniors and the senior future teachers were recognized. Retiring officer awards were presented to President — Susan Spinks. Vice President — Katie Hickerson, Treasurer — Chassity Warner, Secretary — Shelby Winchell, Newsletter Editor — Rachel Conley, Social Media — Macie White. Leadership awards for each class were: Freshman — Breanna Burkhead, Sophomore —



Macie White, and Junior Jordan Olson. The Rising Sun Award for teaching zero to 5 years was awarded to Alumni Emilee Graves (B.S., 2018). Mattie Mink and Bradon Burks were the graduating seniors and completed all the requirements for teacher certification. Bradon Burks received the Outstanding Senior Undergraduate Student Award. Mattie Mink received the Ogden College Agricultural Education Award.

The AES Scholarship Fund is still open for donations. The money raised in this fund will be given to AgEd



students. It cannot be awarded until we meet the \$10,000 minimum. All donations are accepted.

If you know of any student that would like to be an Agricultural Teacher, please forward their information to Dr. Kingery so he may invite them to campus for a visit.

For further correspondence please contact Dr. Kingery at thomas.kingery@wku.edu or (270) 745-3152.

Submitted by Dr. Thomas Kingery









# Baker Arboretum Internship News

A lot goes into maintaining the stately, cutting-edge Baker Arboretum, which consists of 15 acres of heavily manicured land on a 115-acre property. Each year, the arboretum hires six WKU Horticulture students as interns from March to October, allowing us to experience the full seasonal transformation of the arboretum. Interns water, weed, fertilize, and prune daily to keep the arboretum looking its best. Each day brings a multitude of new challenges and learning experiences, including determining plant needs, designing landscapes, and managing pests.

Throughout our internship, we have had many opportunities to build our landscape design skills. We have designed many beautiful mixed plant containers that help brighten areas all around the arboretum. We were also given the opportunity to design and plant the Welcome Bed, which is located at the pedestrian entrance to the arboretum. We used exotic plants such as cacti,



Interns showing arboretum pride. L-R: Jacob Causey, Megan Mudd, Micah Treves, Mason Ross, Sydney Throneberry, and Maggie Jones

agave, succulents, etc. which provide contrast to native style garden beds surrounding the Welcome Bed. The full sun location of this bed creates a hot and arid environment in which these exotic plants flourish.

As interns, we were also consulted to design the arboretum's Pollinator Garden. The arboretum introduced the Pollinator Garden as a Monarch Waystation, providing resources such as milkweed to help monarch butterflies reproduce and sustain migration habits. We expanded and re-shaped the Pollinator Garden to maintain more professional garden beds around the arboretum. As a group, we measured, shaped, and planted annual plants in the garden. We used a drone to show the shape of the beds from above, allowing us to evenly measure and construct the bed. We planted flowering annuals around existing perennial plants to enhance the design and attract more pollinators. Building the Pollinator Garden helped teach us landscape design and construction skills on a large scale.

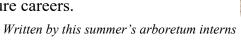
One of many important tasks while interning at the Baker Arboretum is protecting our trees from pests and disease. Ash trees are a primary example of a vulnerable yet valuable asset to the arboretum's tree diversity. For the last twenty years, ash trees have been under attack by the invasive emerald ash borer. The emerald ash borer is a beetle native to Asia that feeds on the cambium layer of the tree, which interferes with water and nutrient transportation between roots and branches. With ash trees making up roughly 30% of the arboretum's tree canopy, it is critical to treat and preserve them. To protect our ash trees, we treat them annually with a chemical drench of Imidacloprid — a systemic pesticide — that gets taken up by the roots and transported throughout the tree where it can control canopy die-back and further suppress breeding by the emerald ash borer.

Through our internship, we are becoming stronger horticulturalists by obtaining skills in landscape design



Maggie planting marigolds in the Pollinator Garden

and maintenance, as well as the tools to overcome plant health issues, which are the most important aspects of a public garden like the Baker Arboretum. The Jerry E. Baker Foundation provides scholarship and internship opportunities for horticulture students. We are grateful to The Baker Foundation for providing this educational work experience that is helping us build our skills as horticulturalists that will prove crucial to our future careers.





Interns after planting the Welcome Bed

#### Meat Science Research

Kentaro Kawata is a high school senior at the Gatton Academy of Mathematics and Science located at the WKU campus. This past summer, Kentaro developed a research internship in the WKU Meat Lab under the supervision of Dr. Luiz Silva. This summer project was supported by the Gatton Research Internship Grant program. Kentaro is an enthusiast of Food Science, particularly emulsions, which is a relatively stable mixture of fat (non-polar) and an aqueous phase (polar). In the case of meat emulsions, the animal proteins present in the muscle act as an emulsifier, a compound that stabilizes the mixture, preventing separation. Meat emulsion is prepared to produce hot dogs and bologna, among other types of processed meat. However, not all muscle proteins have the same emulsifying ability. Thus, Kentaro and Dr. Silva designed a well-controlled study to evaluate the effect of collagen concentration on meat emulsion stability. They used "silver skin", donated by Rian's Fatted Calf Meat Shoppe, as a natural collagen source. Silver skin is a byproduct of the meat industry since butchers trim it from steaks to improve the consumer's eating experience. In this study, they had three levels of silver skin inclusion (0, 5, and 10%) in the emulsion that was



created using a bowl chopper. After emulsion preparation, they did some measurements and took samples for collagen analysis that was performed at the WKU Biotech Center, and another set of samples were sent out to Dr. de Mello at the University of Nevada Reno for texture analysis. As partial results, they found that the inclusion of silver skin linearly increased fat loss while cooking, indicating the collagen is not a good emulsifier. However, cooked emulsion hardness decreased as silver skin was added to the emulsion, suggesting that the inclusion of this collagen source may produce a tender product. They are still interpreting and discussing the data and hope to publish their findings soon.

Submitted by Dr. Luiz Silva

# Gary Beu (1947-2021)

WKU Department of Agriculture was extremely saddened to lose Gary Beu this year. Gary served as Artisan Cheese Maker for Hilltopper Creamery housed within WKU's AREC. He was instrumental in getting the facility licensed and operational. Gary had a love for cheese and people. He was most happy when he was able to teach the public and our students about the cheese making process. Gary was born in Texas but spent the majority of his life in Alaska. He had several careers but retired to KY after operating his own dairy and cheese facility in Alaska. The Department was able to lure him out of retirement to help get the creamery operational. For his efforts, we are extremely grateful. A celebration of life ceremony was held at the L.D. Brown Agriculture Exposition Center in January for Gary. We miss you Gary!

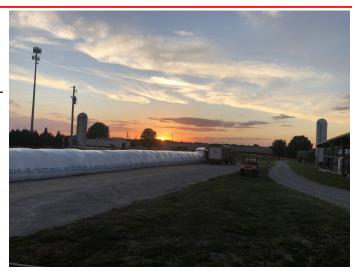


Gary Beau making the first batch of cheese at Hilltopper Creamery (April 2017)

Submitted by Dr. Paul Woosley

#### Dairy News

Big news at AREC this year was the WKU Dairy's partnership with the National Holstein Association to form the WKU Smart Holstein Lab. This partnership was made possible by grants received from the National Holstein Association and the Kentucky Agriculture Development Board. The grant will help place new technologies at the Dairy for demonstration and educational purposes. The WKU Dairy is the 1<sup>st</sup> herd in the US to install the Dutch Mountain cattle mattresses in the free-stall barn. Other technologies in place



are: cameras with artificial intelligence, several heat detecting systems, barn condition monitoring systems and weather station, and an automatic footbath. Upgrades yet to be added are: cattle misters, new barn ventilation, new barn curtains, robotic manure scraper, feed pusher and cattle brushes, and milk monitoring system. WKU's dairy cows will be some of the most pampered cattle in the country.

Alumni can also now send a cow to college! The WKU Dairy is starting to receive milk cows through this program. For more information, please visit <a href="https://www.smartholstein.com/">https://www.smartholstein.com/</a> sendaholstein.



A couple other milestones were reached at the Dairy this year. This past summer, the Dairy reached its goal of milking 50 cows. Now the focus shifts from improving herd numbers to improving genetics. Also, AREC invested in some silage chopping equipment. For the first time in around 10 years, corn silage will once again be part of the Dairy's feed ration.

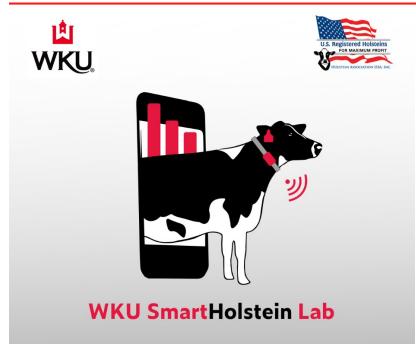
Submitted by Dr. Paul Woosley



Twin heifer calves born at the dairy this past June



#### WKU Smart Holstein Lab



BRATTLEBORO, Vt. July 19, 2021 — Holstein Association USA, in partnership with Western Kentucky University (WKU) and the Kentucky Agricultural Development Fund, is thrilled to announce the formation of the WKU SmartHolstein Lab. The lab, located at the WKU Agriculture Research and Education Center, is designed to be a research, development, and demonstration center for the dairy industry.

"We're delighted to be able to work with Western Kentucky University on the WKU SmartHolstein Lab partnership. This creative initiative gives us the opportunity to work with new dairy technology and data and assess how it can be of value to Association members and the dairy community at

large," states Holstein Association USA Chief Executive Officer John M. Meyer.

The mission of the WKU SmartHolstein Lab is to lead Holstein and dairy advancements through research, development, and outreach in technologies, analytics, and genetics. This endeavor will also provide students with unique experiential learning opportunities.

"The WKU SmartHolstein Lab is a remarkable collaboration with Holstein Association USA, the Kentucky Agricultural Development Fund, and a number of dairy industry partners. This collaboration will provide unique opportunities that will directly benefit our students, dairy producers, and the dairy industry in general," says Dr. Fred DeGraves, Chair, Western Kentucky University Department of Agriculture & Food Science. "We are excited with the synergism this collaboration offers and look forward to the wide array of opportunities in teaching, research, and outreach that this project will generate. We would like to thank Holstein Association USA, the Kentucky Agricultural Development Board, the Kentucky Dairy Development Council, our dairy industry collaborators, and dairy producers from across the Commonwealth of Kentucky for their support of this project.

The WKU SmartHolstein Lab will greatly enhance the educational experience of our Agriculture & Food Science students. Our program is all about providing experiential learning opportunities and this Lab will allow our students to work with cutting-edge technologies on a daily basis. In addition to classroom and laboratory activities, our students provide the day-to-day labor that operates the dairy, which will allow our students to become quite familiar with the technologies. They will also be directly involved with the assessment of these technologies through applied research projects, which will offer an opportunity for students to have a role in improving the technologies. Our students will experience first-hand genomic testing, genetic selection strategies, and advanced analytics. Understanding these technologies will be fundamental to the success of our future dairy producers and having the WKU SmartHolstein Lab as a demonstration herd will provide the ideal classroom environment for making this happen."

#### WKU Smart Holstein Lab

The WKU dairy farm is set up to milk 50 cows and raise associated replacement heifers. The long-term goal is to develop a 100% A2, polled herd of cows in the top 20% of the breed for TPI with additional emphasis on health, reproduction, and fitness traits.

To increase the genetic potential of the herd at the WKU SmartHolstein Lab, Holstein Association USA members are invited to donate Registered Holstein® animals or embryos through the Send a Holstein to College program. If you do not currently own Holsteins but would like to contribute to the Send a Holstein to College effort, we will help you identify a breeder or an auction where you can buy a Holstein to donate. To nominate an animal for the program or learn more, visit www.smartholstein.com. Nomination forms are due December 1, 2021.

The SmartHolstein Lab has been established as an easy-to-access demonstration and development farm to explore new technologies designed to collect novel phenotypic traits including wearable or indwelling sensors and milk-based biomarkers. A major emphasis will be placed on practical use of data for on-farm decision making. This herd will also be a nucleus herd for genetic selection strategies and collection of novel phenotypic information.

"I want to congratulate Western Kentucky University and Holstein Association USA on this incredible ag tech partnership," said Kentucky's Commissioner of Agriculture Dr. Ryan Quarles. "As Chair of the Kentucky Agricultural Development Board, I speak for all our board members when I say we all believe strongly in the importance of cutting-edge research to the future of the agriculture industry. Projects such as the WKU SmartHolstein Lab will help us innovate our way to the next generation of Kentucky agriculture. The Kentucky Agricultural Development Board is proud to support this initiative."

Collaborations and partnerships from established and startup dairy technology and data providers are welcomed and essential for the success of this project. Many industry partners have already donated

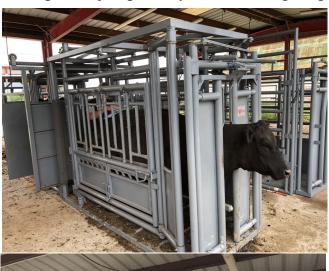
technologies to this endeavor. The WKU SmartHolstein Lab is a place where partners can come to explore new opportunities with an experienced team of dairy analytics leaders. Industry partnerships may come in the form of donation of expertise, technologies, or graduate student stipends. Mutually beneficial collaborations with other university faculty members, international visitors and scientists, and non-profits are also welcome. Please contact us at wkudairy@smartholstein.com with questions or expressions of interest. You can learn more about the WKU SmartHolstein Lab at www.smartholstein.com or by following SmartHolstein on Facebook or Instagram.



Written by Holstein Association USA and Dr. Fred DeGraves

#### Livestock Unit

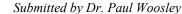
The Livestock Unit continues its partnership with Select Sires and the young sire program. Also, the upgrades to the Livestock Teaching Pavilion have vastly improved the ease and safety of which beef cattle are worked. These facilities are utilized often during the semester for animal science courses. The beef cattle herd is growing and up to 65 cows with an expected jump next year due to high replacement heifer

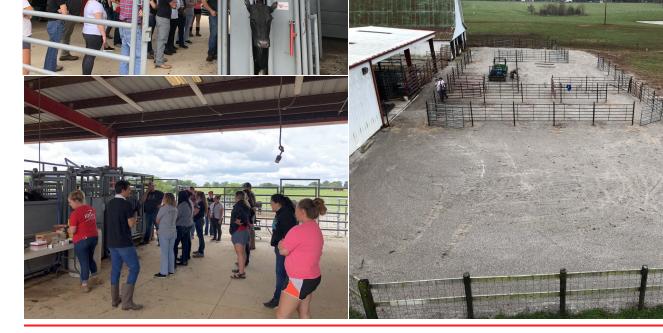


numbers. Like the Dairy, the Livestock Unit is working towards reaching maximum cattle numbers (around 100 cows) based upon space available



at AREC. Some work has also occurred with the feed lot facility this year that included installation of new gutters and concrete repair. A new cattle trailer is set to be delivered this fall as well. Other exciting news with the livestock unit includes the utilization of beef produced at AREC in campus cafeterias. Two finished steers were provided this summer to campus with more scheduled this winter.





#### Crop Production | Research

WKU AREC continues to work with industry on applied agronomic research. Three quarters of the corn and soybean acreage at AREC is dedicated to research. WKU AREC partners are: Bayer, Dekalb/Asgrow, BASF, Xitavo/Credenz, Syngenta, NK, Pioneer, Corteva, LG, Brevant, Channel, GenX, Wheat Tech, Helena, TA Hayden Ag Research, and University of Kentucky. With Covid restrictions eased this past summer, AREC was able to host seven industry field days/ tours. Additionally, AREC hosted the Kentucky Young Farmers Association. In addition to corn and soybean research, WKU continues to work with industrial hemp. Dr. Strunk partners



Dekalb/Asgrow Field Day

with Arcadia Biosciences and Earth Scout to evaluate germplasm and environmental monitoring systems in industrial hemp.

AREC lost its Crop Tech this past January to industry. We would like to thank Mike Saxton for his efforts with crop production and research and wish him the best in his new position. AREC was able to replace Mike this past April with another WKU Alumni, Marie England. Marie arrived at



Industrial Hemp Research

AREC and immediately jumped into planting season. Upon graduation, Marie worked as an agronomist for Robertson Cheatham Farmers Coop. She came to us from H&R Agri Power in Russellville. We are excited to have Marie as part of our team. Despite a cold spring and slug damage, the crops are looking good at AREC and another successful harvest is expected.

Submitted by Dr. Paul Woosley

#### A Day in July

This past July, WKU AREC hosted the Kentucky Young Farmer Association for a University Farm Tour. Approximately 120 young farmers from around the state toured the farm during the morning that concluded with lunch. In addition to the group, the new Dean of Ogden College of Science and Engineering was



in attendance, Dr. David Brown. University Farm tour stops included: Compost Facility, Industrial Hemp, BASF research plots, Bayer research plots, Equine Unit, Beef Unit, WKU public corn and



soybean trials, Dairy, Hilltopper Creamery, and high tunnel vegetable production. Faculty/staff speaking about ongoing research and individual AREC Units at each tour stop were: Dan Strunk, Phillip Gunter, Luiz Silva, Roger Dennis, Fred DeGraves, Paul Woosley, Marie England, Creste Jean, and Israel Mullins. The equipment shed at AREC was utilized for lunch because the Ag. Expo was hosting KDA's Junior Livestock

Show. Many comments were extended to faculty and staff on how well the Department is utilizing the University Farm in research and student education, the amount of research taking place at the University Farm, and the overall appearance of the farm. Dean Brown was also very impressed with the efforts of the Department. It was a proud day for any WKU Alumni in attendance.



Submitted by Dr. Paul Woosley



KDA Junior Livestock Show



KY Young Farmer Association Tour—photo from Kentucky Young Farmer Association

## Growing Vegetables is a Growing Affair at the University Farm

This past summer, Roger Dennis and his team of horticulture students increased vegetable production at the farm. These efforts are a result of a newly budding partnership between the Restaurant Group on campus, Office of Sustainability, Warren County Conservation District, and the Department. The goal of this partnership is to utilize more products produced at AREC to feed students on campus. This year was a pilot program where AREC produced the following vegetables to supplement food items utilized in the Fresh Food Court at the Downing Student Union: broccoli, tomatoes, squash, peppers, sweet corn, watermelon, cantaloupe, green beans, and okra. The Warren County Conservation District purchased plastic laying equipment to be utilized by AREC as well as local vegetable farmers in the area. It is hoped that production can be full scale next year resulting in a significant portion of campus food to be grown at AREC by horticulture students. WKU will be one of a few public universities with such a program. Considering that food scraps from campus are composted at the farm, WKU could possibly be the only university where food produced at the farm is used on campus and the food waste is returned back to the farm. Plans are for this initiative to be marketed under the name 'Farm to Campus'.



Vegetables produced at University Farm on display at Fresh Food Court on campus—photo by Madonna May

Submitted by Dr. Paul Woosley



Plastic Layer Provided by Warren County Conservation Service



Horticulture student worker watering vegetables in high tunnel

# Agronomy Update

#### Student and Staff News

Zach Brinkley, Skyler Crabtree, Justin Holbrook, and Logan Stewart were the WKU Soil Judging Team for the 2020 season. There wasn't an official contest hosted this year in the Southeast Region due to the pandemic, but we were able to see lots of great soil in Warren & Edmonson County (thanks Dr. Woosley)! The

contest for NACTA in the spring was held virtually and we chose not to compete in that scenario. We also congratulate our Graduates of the team,



which include: Zach Brinkley, Skyler Crabtree and Logan Stewart. During Fall 2020 semester, the Soil Fertility Class was unable to tour with our normal groups due to the pandemic. We appreciate all the support from our local Agricultural Industries and the time they take out of their busy schedules to provide tours and assist our students. We look forward to being able to visit with them in the near future.

Congratulations to the 2021 winners of the Outstanding Agronomy Soil Science and Plant Science Students. This year's winners were Justin Holbrook, a Senior from

Springfield, TN and Shelby Winchell from Hawesville, KY. Justin has been a member of the WKU Soil Judging Team for the past two years and Shelby has been active in our department, including a term as a faculty-elected Agricultural Ambassador.

#### Research

Dr. Dan Strunk continues to lead our research efforts on industrial hemp. His research the past 2 years has focused primarily upon evaluation of several hemp cultivars; this project continues to be funded by Arcadia BioSciences. Additionally, Dr. Strunk has, along with undergraduate student Brodie Simmons, investigated the influence of exogenous sugar applications on cannabinoid production; this project was supported by generous donations from Kentucky Biosciences International. Agronomy faculty are also continuing an experiment examining long-term effects (>15 years) of poultry litter and tillage vs. no-till effects on soil used for corn/soybean production.



#### USDA- WKU Agriculture Cooperative Research

Drs. Paul Woosley, Annesly Netthisinghe, Phillip Gunter, Dan Strunk, and Naomi Rowland (WKU Biology) continue a research project to investigate how *Clostridium botulinum* from applied poultry litter affects quality of alfalfa haylage. New research projects will be established in the coming year.

## Equine Update

The WKU Equine program has had a fruitful year, acquiring seven donation horses from around the U.S. in disciplines of western horsemanship, reining, and hunter/ jumpers. These additions have diversified the herd with breeds such as Quarter horse, Arabian, Half-Arabian, Hanoverian, and Warmblood. The new horses have increased the rideability of our horse herd and will allow more students opportunities to learn and grow in their riding and collegiate careers. We would like to extend a heartfelt thank you to all our wonderful community members and alumni for their donations; you continuously make it possible to have a successful program. We are also very excited to welcome back Paige Smith, another WKU alumnus, to the WKU Equine program! We wish her the best in instructing the equine courses and assisting in coaching the Equestrian Team.



Equestrain Team Members Miranda Meastle, Emmy Smith, Madison Parham, and Taylor Walters, recruited students for the Equine program on campus with Taz, one of our reining horses.

The WKU Equestrian Team had a successful first year back on the Hill, showing in eight western shows over the fall and spring semesters against Middle Tennessee State University, Murray State University, Tennessee Tech University, and University of Tennessee – Knoxville. The team was able to bring four WKU horses to contribute to the horse pool at these shows with Taz, Chip, and Patty being favorite draws of the region. Our region was one of the three out of 36 in the nation to participate in the Intercollegiate Horse Shows Association shows both Fall and Spring semesters. The team was comprised of 17 members, and each won ribbons and prizes but most importantly, they persevered and created a team that will continue to serve all equestrians at WKU. This year, a Hunt Seat team will be added to appeal to a greater range of student equestrians.

Over the summer, the WKU Equestrian Team was able to host their first benefit horse show in the indoor practice arena – The Summer Stampede. The show was open to the community and included western, english, and gaited classes for adult and youth riders. Students and equine program alumni served as show secretary, stewards, announcers, runners, and awards presenters, giving them a behind the scenes look at horse show operations. The event

was a success with 94 total entries and many new friendships made. We look forward to hosting this community event yearly. Thank you to all our volunteers and alumni for your support!

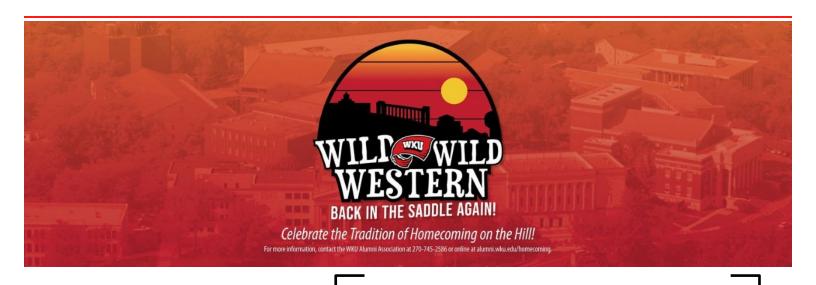
Over the next year, we look forward to recruiting opportunities with regional high schools, increasing the visibility of our equine program by taking Taz (everyone's favorite reining horse) to campus, riding through the Homecoming parade, and helping students on their collegiate horsemanship journeys. For more information on how you can get involved in the WKU Equine program, please contact Creste Jean at creste.jean@wku.edu.



Brooke Sullivan sits aboard Jasper, one of our new English horse donations who will help establish our Hunt Seat Team.



Blondie and Ariel, aged 3 and 4, are two of our newest donations from Arizona.



We hope that you have enjoyed our Newsletter this year. Please make a gift today to support the Department of Agriculture and Food Science. Your financial support will help with student learning opportunities outside of the classroom.

# Agriculture Alumni Homecoming Celebration:

Saturday, October 30, 2021 9:30 AM WKU L.D. Brown Ag Expo Center

To whom it may concern,

My name is Cris Scudder and I am an instructor in the Agriculture Department at Western Kentucky University. Each February, our department attends and furnishes a booth at the National Farm Machinery Show in Louisville, KY. We use this time as a significant recruitment tool for our department and our school. Students and teachers attend from many different states and many different high schools where they can fill out a form to gain more information on what our department has to offer. We are looking for sponsors for this event to help fund our travel, stay, and recruitment materials with a goal of \$2500. Your business name will be placed on a sign on our booth stating you have sponsored the WKU Ag. and Food Science Department booth. We appreciate any and all sponsorship dollar amounts. Please send sponsorship to:

Dept. of Agriculture and Food Science Machinery Show Sponsorship Western Kentucky University 1906 College Heights Blvd. 41066 Bowling Green, KY 42101-1066

You can also email me at Cris.scudder@wku.edu or text me (270) 303-0237.

Thank you,

Cris Scudder WKU Dept. of Ag and Food Science Please make checks payable to the "WKU Foundation"

Donations can be mailed to:

Department of Agriculture Western Kentucky University 1906 College Heights Blvd #41066 Bowling Green, KY 42101

Or Visit:
<a href="https://www.wku.edu/makeagift">www.wku.edu/makeagift</a>
Under Designations type Agriculture

#### www.wku.edu/agriculture

Follow us on our social media pages:



facebook.com/wku.agriculture



twitter.com/wkuagriculture



@wkuagricultureandfoodscience